DEPARTMENT OF THE NAVY
COMMANDER
NAVAL METEOROLOGY AND OCEANOGRAPHY COMMAND
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NAVMETOCCOMINST 4790.2B
N5
06 DEC 2000

NAVMETOCCOM INSTRUCTION 4790.2B

From: Commander, Naval Meteorology and Oceanography Command

Subj: MAINTENANCE AND MATERIAL MANAGEMENT (3M) SYSTEMS POLICIES AND PROCEDURES FOR NAVMETOCCOM SPONSORED EQUIPMENT

Ref: (a) OPNAVINST 4790.4C, Issue of Ship's Maintenance and Material Management (3M) Manual
(b) NAVMETOCCOMINST 13950.1L, (Meteorological Equipment Management and Planning Policy
(c) MIL-P-24534 (NAVY), Planned Maintenance System: Development of Maintenance Requirement Cards, Maintenance Index Pages and Associated Documentation MIL-P-24534 (NAVY) (PLANNED MAINTENANCE SYSTEM)

Encl: (1) Preventative Maintenance Scheduling
(2) 3M Spot Check Guide
(3) List of 3M System Acronyms

1. **Purpose** To promulgate policy, guidance and procedures for managing the Planned Maintenance System (PMS) on Naval Meteorology and Oceanography Command (NAVMETOCCOM) sponsored and managed equipment. This instruction only pertains to NAVMETOCCOM sponsored equipment. Those NAVMETOCCOM activities having maintenance responsibilities for COMSPAWARSYSCOM sponsored and managed equipment will comply with reference (a). This instruction has been completely revised and should be read in its entirety.

2. **Cancellation** NAVMETOCCOMINST 4790.2A

3. **Background** The Meteorological and Oceanographic Equipment Program (MOEP) was established in the 1960s and provided a NAVMETOCCOM program for maintenance records, configuration control and planned maintenance. In 1990, the MOEP was disestablished and no longer provided these services. At the same time, NAVMETOCCOM Production Centers, Theater Centers, and designated Facilities assumed maintenance responsibility for designated COMSPAWARSYSCOM sponsored equipment. To ensure

adequate maintenance and supply support, COMSPAWARSYSCOM mandated that responsible NAVMETOCCOM activities would comply with the Navy's 3M Program. In 1996, COMNAVMETOCCOM tasked the Naval Oceanographic Office (NAVOCEANO) to develop a simplified and cost effective 3M program to cover NAVMETOCCOM Sponsored Meteorological Equipment (NSME). In 2000, COMNAVMETOCCOM directed NAVOCEANO to revise the instruction to ensure that an adequate and affordable preventive maintenance program remained in place.

4. **Information** NAVMETOCCOM acts as the Type Commander (TYCOM) for NAVMETOCCOM activities with regard to specific NAVMETOCCOM and COMSPAWARSYSCOM sponsored equipment. As TYCOM, NAVMETOCCOM is responsible for the maintenance and life cycle support of these systems. To provide coordination and guidance while establishing 3M procedures, NAVMETOCCOM has designated the NAVOCEANO to revise the 3M instruction and to develop and maintain Maintenance Index Pages (MIP) and Maintenance Requirement Cards (MRC), and to distribute them as required to activities using NAVMETOCCOM sponsored equipment. Marine Corps Weather Offices having custody of NAVMETOCCOM sponsored meteorological equipment will be provided Planned Maintenance System (PMS) documentation from NAVOCEANO. Marine Corps weather offices will not be required to report PMS accomplishments to COMNAVMETOCCOM. (This instruction does not apply to SPAWARSYSCOM sponsored equipment. NAVMETOCCOM activities are responsible for following the 3M System on SPAWARSYSCOM sponsored equipment in accordance with reference (a)). NAVMETOCCOM sponsored equipment will be maintained in accordance with this instruction. NAVMETOCCOM activities and Marine Corps weather offices are responsible for performing Preventative Maintenance (PM) on NAVMETOCCOM sponsored Meteorological equipment listed in reference (b) (e.g., METOC Integrated Data Display System (MIDDS), Interim-Mobile Oceanographic Support System (I-MOSS), etc). NAVOCEANO will acquire/develop and distribute PMS for all NAVMETOCCOM sponsored equipment.

Management of PMS at the detachment level will be the responsibility of the cognizant NAVMETOCCOM Centers and Facilities.

5. **Action**

(a) **COMNAVMETOCCOM is responsible for the following Planning, programming and resource management functions:**

(1) Providing overall policy, procedural guidance and centralized management for the NAVMETOCCOM 3M Program.

(2) Providing resources for the execution of the NAVMETOCCOM 3M Program.

(3) Analyzing 3M reports and providing recommendations to NAVMETOCCOM Regional Centers.

(b) **NAVOCEANO is responsible for the following:**

(1) Management of the NAVMETOCCOM 3M PMS Program.

(2) Developing standard PM tasks for NAVMETOCCOM sponsored meteorological equipment in accordance with reference (c).

(3) Distribution of PMS documentation to the Centers, Facilities, and Detachments.

(4) Reviewing and taking appropriate action on PMS technical Feed Back Reports (FBR) on NAVMETOCCOM sponsored equipment.

(c) **NAVMETOCCOM activities are responsible for the following:**

(1) Ensuring that the policies of this instruction are implemented.

(2) Scheduling and conducting PM in a timely manner (enclosure (1)).

(3) Designating a 3M Systems coordinator or a 3M point of contact.

(4) Ensuring that 3M spot checks are completed.

(5) Ensuring that the command has an active 3M training program.

(d) **3M System Coordinators or designated 3M points of contact are responsible for the following:**

(1) Distributing 3M information within the command and the command's AOR.

(2) Monitoring the command's 3M System.

(3) Reviewing FBR's, maintaining the command master file and submitting FBR's to NAVOCEANO (N643) with a copy to COMNAVMETOCCOM (N5).

(4) Forwarding semi-annual PMS accomplishment reports to COMNAVMETOCCOM (N5) via standard naval letter. Detachments will forward reports to their cognizant parent command or facility who will in turn consolidate the report.

6. **Maintenance Data System (MDS)**. MDS documentation will not be required on NAVMETOCCOM sponsored equipment. Commands may document maintenance actions to satisfy their individual requirements. MDS documentation on COMSPAWARSYSCOM sponsored equipment will be in accordance with reference (a).

7. **Planned Maintenance System (PMS) Feedback Report (FBR)**. The PMS FBR (OPNAV Form 4790/7B) will be used to notify NAVOCEANO of matters related to PMS on NAVMETOCCOM sponsored equipment. Original FBRs will be forwarded to NAVOCEANO (N643) with a copy to COMNAVMETOCCOM (N5). FBRs will be signed per reference (a). NAVOCEANO will investigate all FBRs, and take appropriate action. FBRs will be submitted as follows:

(a) Centers and Facilities - To NAVOCEANO.

(b) Detachments - To the cognizant Center's or Facility's 3M Systems Coordinator for review and transmission to NAVOCEANO.

8. **3M Assessments and Assist Visits**. 3M assessments will only be conducted during Command inspections. NAVOCEANO will provide technical assistant visits as required, approved, and funded by COMNAVMETOCCOM.

9. **Spot-Checks**. The Commanding Officer or Officer-in-Charge will designate personnel to perform spot checks. Individual Maintenance Requirements (MR) will be spot-checked to determine the effectiveness of PMS accomplishment (enclosure (2)).

10. **Maintenance for Deployed Mobile Environmental Team (MET).** Whenever possible and, without exceeding the periodicity windows, PM should be completed prior to, during, and after returning from deployments. It is highly recommended that post and pre-deployment inspection of equipment be conducted.

11. **Reports.** Each NAVMETOCCOM activity shall submit a semi-annual PMS Accomplishment Report. The report shall consist of the number of inspections scheduled and the number completed. Detachments will report to their cognizant Center or Facility, who will consolidate the reports and forward to COMNAVMETOCCOM (N5) no later than 15 days after the end of the reporting periods, which are 15 January and 15 July.

12. **ACRONYMS.** Enclosure (3) is a list of commonly used 3M System acronyms.

13. **To Contact NAVOCEANO on 3M System Matters**

Address:
Commanding Officer
Naval Oceanographic Office
Code (N643), 3M Systems
1002 Balch Blvd.
Stennis Space Center, MS 39522-5001
Phone: DSN 485-4396
Commercial (228) 688-4396
Fax: DSN 485-4168
Commercial (228) 688-4168
E-mail: garnerl@navo.navy.mil

LARRY WARRENFELTZ
Acting

DISTRIBUTION:

FD Shore Activities under the Command of COMNAVMETOCCOM
FKA1B Space and Naval Warfare Systems Command (PMW-155 only)

PREVENTATIVE MAINTENANCE SCHEDULING

1. **Introduction.** NAVMETOCCOM PMS provides a simple means for planning, scheduling, controlling, and performing planned maintenance, and represents an efficient means for using available maintenance resources. PMS actions are the minimum required to maintain equipment in a fully operable condition and within specifications.

2. **Action**

   (a) Each NAVMETOCCOM command will develop PM schedules for NAVMETOCCOM sponsored equipment in accordance with reference (a) or this instruction.

   Note: Reference (a) provides instructions for completing cycle, quarterly and weekly PMS schedules. For commands having limited numbers of PMs, a locally generated PMS scheduling spread sheet may be developed as long as all vital information is included in the document.

   (b) When scheduling PMS, ensure that the PM workload is balanced and that they are accomplished as scheduled. For operational requirements and planning, PM may be performed within these limits:

   1/**Daily** - Performed every day.

   2/**Weekly** - One day prior or one day after the scheduled date.

   3/**Monthly** - Three days prior or three days after the scheduled date.

   4/**Quarterly** - Seven days prior or seven days after the scheduled date.

   5/**Semi-Annual** - Fourteen days prior or fourteen days after the scheduled date.

   6/**Annual** - Twenty-one days prior or twenty-one days after the scheduled date.

3-M SPOT CHECK GUIDE

1. **Introduction.** To have an effective Maintenance Program, all levels of management must be involved and responsible for PMS performance. A command's PMS spot-check program is the single most important tool a command can have in maintaining a successful 3-M Program. The individual performing the spot check should be a senior member of the command that is qualified on, and knows the condition of their equipment.

2. **Schedule.** As a minimum, the following number of spot checks should be performed:

   (a) Centers - Ten percent of the scheduled Maintenance Requirements (MR) or a maximum of three per month.

   (b) Facilities - Ten percent of the scheduled MRs or a maximum of three per month.

   (c) Detachments - Ten percent of the scheduled MRs or a maximum of one per month.

   (d) Mobile Environmental Team - Ten percent of the scheduled MRs or a maximum of three per month.

3. **Spot Check Procedures**

   (a) Select a Maintenance Requirement (MR) that had been recorded as accomplished. Check the Maintenance Index Page (MIP) to see if there is any related maintenance that is required to be performed together with the MRC that is being spot checked.

   (b) Identify the individual who was assigned to perform the Maintenance Requirement. Ask the maintenance person if he/she was listed on the schedule to perform the PM.

   (c) Have the maintenance person pull the Maintenance Requirement Card (MRC) for review so the spot checker can become familiar with the actions needed to do the MR. Proceed with the individual to the equipment.

(d) Question the maintenance person about the piece of equipment on the MRC and the maintenance procedures. Maintenance personnel are not required to memorize the maintenance procedures on the MRC. Inquiries should be made to determine the following:

1. Were all segments of the MRC completed?

2. Were Safety precautions observed?

3. Were the proper tools/materials available and used?

(e) If disassembling the equipment is required as part of the maintenance procedure, the spot checker should ask the maintenance person how the disassembly is accomplished and assess the equipment for evidence of disassembly.

(f) Let the maintenance person demonstrate the knowledge and skills required to perform the steps on the MRC by observing his/her actions when performing all steps on the MRC.

(g) After completing the spot check, notify the 3-M coordinator or the 3-M point of contact that the spot check was performed for their records.

The Spot Check Program must cover the full spectrum of equipment in the command. All equipment must receive spot checks regularly to make the "Spot Check Program" work.

LIST OF 3M SYSTEM ACRONYMS

A

ACF ..... Accomplishment Confidence Factor
ACN ..... Advance Change Notice
ADP ..... Automated Data Processing
ADPE ..... Automated Data Processing Equipment
AEC ..... Assessment of Equipment Condition
AEL ..... Allowance Equipage List
AER ..... Alteration Equivalent to Repair
AI ..... Alteration and Improvement
AILSIN ..... Automated Integrated Language System Identification Number
AIMD ..... Aircraft Intermediate Maintenance Department
AIS ..... Automated Information System
AIT ..... Alteration Installation Team
ALID ..... Automated Library Issue Document
ALRE ..... Aviation Launch and Recovery Equipment
AMS ..... Alteration Management System
APL ..... Allowance Parts List
AR ..... Alteration Request
ASG ..... Afloat Shopping Guide
ASI ..... Automated Shore Interface
ATG ..... Afloat Training Group
ATO ..... Afloat Training Organization
AWR ..... Automated Work Request

B

BACD ..... Basic Alteration Class Drawings
BOATALT ..... Boat Alteration
BOC ..... Base Operating Contract
BUIC ..... Benefiting Unit Identification Code
BUMED ..... Bureau of Medicine and Surgery

C

CAGE ..... Commercial and Government Entity
CANTRAC ..... Catalog of Naval Training Courses
CASREP ..... Casualty Report
CD-ROM ..... Compact Disk - Read Only Memory
CDA ..... Central Design Activity
CDM ..... Configuration Data Manager
NAVMETOCCOMINST 4790.2B
CID. ..... Component Identification Number
CINC ..... Commander in Chief

CIS ..... Commercial Industry Service
CK ..... Configuration Change (Form)
CM ..... Corrective Maintenance
CMP ..... Class Maintenance Plan
CNET ..... Chief of Naval Education and Training
CNO ..... Chief of Naval Operations
COMNAVSEASYSCOM...Commander Naval Sea Systems Command
COMNAVMETOCCOM....Commander Naval Meteorology and Oceanography Command
COMSPAWARSYSCOM...Commander Space and Naval Warfare Systems Command
COSAL ..... Coordinated Shipboard Allowance List
CSA ..... Navy's Central Configuration Status Accounting System
CSMP ..... Current Ship's Maintenance Project

D

DATC ..... Development and Training Center
DBI ..... Demand Based Items
DCA ..... Damage Control Assistant
DCPO ..... Damage Control Petty Officer
DEN ..... Data Element Number
DFS ..... Departure from Specification
DLR ..... Depot Level Repairable
DOD ..... Department of Defense
DPMA ..... Docking Phased Maintenance Availability
DT ..... Downtime

E

EC ..... Engineering Change
ECP ..... Engineering Change Proposal
EGL ..... Equipment Guide List
EIC ..... Equipment Identification Code
ELEX ..... Electronics Equipment
EOSS ..... Engineering Operational Sequencing System
ESWBS ..... Expanded Ship Work Breakdown Structure

F

FBR ..... Feedback Report
FC ..... Field Change
FGC ..... Functional Group Code
FLENUMMETOCCEN ... Fleet Numerical Meteorology and Oceanography Center
FLETRACEN ..... Fleet Training Center

FLR ..... Field Level Repairable
FMP ..... Fleet Modernization Program
FMPMIS ..... Fleet Modernization Program Management Information System
FMSO ..... Fleet Material Support Office
FPR ..... Failed Part Reporting
FR ..... Force Revision
FSCM ..... Federal Supply Code for Manufacturers
FTSCLANT ..... Fleet Technical Support Center, Atlantic
FTSCPAC ..... Fleet Technical Support Center, Pacific

H

HAZMAT ..... Hazardous Material
HM&E ..... Hull, Mechanical, and Electrical Equipment
HMUG. ..... Hazardous Material User's Guide
HT ..... Hull Technician

I

IEM ..... Inactive Equipment Maintenance
ILO ..... Integrated Logistics Overhaul
ILS ..... Integrated Logistics Support
ILSMT ..... Integrated Logistics Support Maintenance Team
IM ..... Intermediate Maintenance
IMA ..... Intermediate Maintenance Activity
IMAV ..... I-Level Maintenance Availability
INSURV ..... Board of Inspection and Survey
ISEA ..... In-Service Engineering Agent
ISIC ..... Immediate Superior in Command
IUC ..... Intermediate Unit Commander

J

JCN ..... Job Control Number
JETDS ..... Joint Electronic Type Designation System
JSN ..... Job Sequence Number

L

LATD ..... Lacks Adequate Technical Description
LID ..... Library Issue Document
LOEC ..... List of Effective Cards
LOEP ..... List of Effective Pages
LSD ..... Logistic Support Data
LU ..... Lay-Up Maintenance
LWC ..... Lead Work Center

M

MA ..... Maintenance Action
MACHALT ..... Machine Alteration
MACN ..... Manual Advance Change Notice
MCB ..... Maintenance Control Board
MCC ..... Material Control Code
MDCO ..... Maintenance Document Control Office
MDS ..... Maintenance Data System
MDSTEIR ..... Maintenance Data System Transaction Error Identification Report
MEASURE ..... Metrology Automated System for Uniform Recall and Reporting
MH ..... Man-hour
MHR ..... Material History Report
MILSTRIP ..... Military Standard Requisitioning and Issue Procedures
MIP ..... Maintenance Index Page
MIS ..... Management Information System
MJC ..... Master Job Catalog
MPR ..... MDS Performance Rate
MR ..... Maintenance Requirement
MRC ..... Maintenance Requirement Card
MRS ..... Maintenance Requirement Substantiated
MSC ..... Maintenance Support Center
MTR ..... Mandatory Turn-In Repairable
MTS ..... Moored Training Ship
MTSSY ..... Moored Training Ship Support Yard

N

NALCOMIS ..... Naval Aviation Logistics Management Information System
NARDAC ..... Navy Regional Data Automation Center
NAVCENTMETOCCEN .. Naval Central Meteorology and Oceanography Center
NAVCOMTELSTA ..... Naval Computer and Telecommunications Station
NAVDAC ..... Naval Data Automation Command
NAVEURMETOCCEN ... Naval European Meteorology and Oceanography Center
NAVEURMETOC DET .. Naval European Meteorology and Oceanography Detachment
NAVEURMETOCFAC....Naval European Meteorology and Oceanography Facility
NAVICECEN ..... Naval Ice Center
NAVLANTMETOCCEN .. Naval Atlantic Meteorology and Oceanography Center

NAVLANTMETOC DET . Naval Atlantic Meteorology and Oceanography Detachment
NAVLANTMETOCFAC .. Naval Atlantic Meteorology and Oceanography Facility
NAVMETOCPRODEVCEN. Naval Meteorology and Oceanography Professional Development Center
NAVMASSO ..... Navy Management Systems Support Office
NAVMASSO PAC ..... Navy Management Systems Support Office Detachment, Pacific
NAVMEDCOM ..... Naval Medical Command
NAVOCEANO ..... Naval Oceanographic Office
NAVPACMETOCCEN ... Naval Pacific Meteorology and Oceanography Center
NAVPACMETOC DET .. Naval Pacific Meteorology and Oceanography Detachment
NAVPACMETOCFAC ... Naval Pacific Meteorology and Oceanography Facility
NAVSEA ..... Naval Sea Systems Command
NAVSEALOGCEN ..... Naval Sea Logistics Center
NAVSEASYSCOM ..... Naval Sea Systems Command
NAVSSES ..... Naval Ship Systems Engineering Station
NAVTRAMETOC DET .. Naval Training Meteorology and Oceanography Detachment
NAVTRAMETOCFAC ... Naval Training Meteorology and Oceanography Facility
NC ..... Not Carried
NEC ..... Navy Enlisted Classification
NHA ..... Next Higher Assembly
NICN ..... Navy Item Control Number
NIR ..... No Individual Requirement
NISMF ..... Navy Inactive Ship Maintenance Facility
NMR ..... No Maintenance Required
NROTC ..... Naval Reserve Officers Training Corps
NSN ..... National Stock Number

O

O&MN ..... Operation and Maintenance Navy
OM ..... Organizational Maintenance
OPNAV ..... Naval Operations (CNO staff)
ORD ..... Ordnance Equipment
ORDALT ..... Ordnance Alteration
OT ..... Operational Test
OWP ..... Overhaul Work Package (Submarines)

P

PD ..... Priority Designator

PEB ..... Propulsion Examining Board
PEETE ..... Portable Electrical/Electronic Test Equipment
PERA ..... Planning and Engineering for Repairs and Alterations
PM ..... Periodic Maintenance
PMDO ..... Planned Maintenance During Overhaul
PMR ..... Periodic Maintenance Requirement
PMS ..... Planned Maintenance System
PMT ..... Performance Monitoring Team
POM ..... Program Objective Memorandum
PPE ..... Personal Protective Equipment
PPR ..... PMS Performance Rate
PQS ..... Personnel Qualification Standard
PREINSURV ..... Pre-Inspection and Survey
PSA ..... Post-Shakedown Availability

Q

QA ..... Quality Assurance
QC ..... Quality Control

R

RAUIC ..... Repair Activity Unit Identification Code
RAV ..... Restricted Availability
RCM ..... Reliability Centered Maintenance
REC ..... Re-entry Control
RIC ..... Repairable Identification Code
RIN ..... Record Identification Number
RM&A ..... Reliability, Maintainability, and Availability
ROH ..... Regular Overhaul
ROV ..... Repair of Other Vessels
RSG/MCC ..... Readiness Support Group/Maintenance Coordinating Center
RWC ..... Repair Work Center

S

SAC ..... Service Application Code
SAR ..... Ship's Alteration Record
SARP ..... Ship's Alteration and Repair Package
SCAT ..... Sub-Category Code
SCLSC ..... Ship's Configuration Logistic Support Control
SCLSIS ..... Ship's Configuration Logistic Support Information System
SEAS ..... Supply Edit Audit and SIM System
SEF ..... Ship's Equipment File
SEL ..... Selected Equipment List

SFWL ..... Ship's Force Work List
SHAPM ..... Ship's Acquisition Program Manager
SHIPALT ..... Ship Alteration
SIMA ..... Shore Intermediate Maintenance Activity
SLCC ..... Ship's Logistics Component Configuration
SLEC ..... Ship's Logistics Equipment Configuration
SLM ..... Ship's Logistics Manager
SMIC ..... Special Material Identification Code
SMIP ..... Ship's 3-M Systems Improvement Program
SMMSO ..... SSBN Maintenance Monitoring Support Office
SMS ..... Surface Missile System
SNAP ..... Shipboard Non-Tactical ADP Program
SOC ..... Scope of Certification
SPALT ..... Special Projects Alteration
SPAWARSYSCOM ..... Space and Naval Warfare Systems Command
SPCC ..... Ships Parts Control Center
SPETERL ..... Ship's Portable Electrical/Electronics Test Equipment Requirements List
SPIN ..... Standard PMS Item Name
SPMIG ..... Standard PMS Material Identification Guide
SRD ..... Selected Record Date/Drawing
SSC ..... Supply Support Center
STEP ..... Shipboard Training Enhancement Program
SU ..... Start-Up Maintenance
SUBMEPP ..... Submarine Maintenance, Engineering, Planning, and Procurement
SUPSHIP ..... Supervisor of Shipbuilding, Conversion, and Repair, USN
SWAB ..... Ship's Work Authorization Boundary
SWBS ..... Ship's Work Breakdown Structure
SWLIN ..... Ship's Work Line Item Number
SYSCOM ..... System's Command

T

T/A ..... Type Availability
TAV ..... Technical Availability
TECSUPGRU ..... Technical Support Group
TEI ..... Test Equipment Index
TFBR ..... Technical Feedback Report
TGL ..... Tag Guide List
TM ..... Technical Manual
TMDER ..... Technical Manual Deficiency/Evaluation Report
TRF ..... Trident Refit Facility
TSU ..... TYCOM Support Unit
TYCOM ..... Type Commander
TYCOM REP ..... Type Commander Representative

U

UIC ..... Unit Identification Code
UM ..... Unscheduled Maintenance
UND ..... Urgency of Need Designator
USNA ..... U.S. Naval Academy

W

WC ..... Work Center
WDC ..... Work Definition Conference
WPNSTA ..... Weapons Station
WSF ..... Weapon Systems File